



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_10986
Title of the Manuscript:	THE MECHANICAL AND PHYSICAL CHARACTERISTICS OF STEEL DUST BRICKS

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
The authors did not respond to many reviewer compulsory comments: ➤ The authors should give the bentonite's chemical analysis. ➤ Line 94: Before being stored in air, when should specimens be unmolded. ➤ For scientific researches, scientists have to carry any test according to local or worldwide standards and recommendations, which have to be cited in the paper. ➤ Line 137, authors have not to mention the brand or manufacturer. ➤ The figures are still not very clear. They can be better if the legends are on the top and the figure become larger. ➤ In the results and discussion section, for the cold crushing strength, the refractoriness, and the thermal shock resistance: The authors give the results and make conclusions, without figures or tables, if this is not possible the samples situation which is not countable. Some picture can express this.	The chemical composition of bentonite used is SiO₂-61% , Al₂O₃-22%, Fe₂O₃-2.2% , Na₂O-2.7% , MgO-2.5% . CaO-1.2% , K₂O-0.4% , H₂O-8%. This comment is not clear in expression; but we guess you meant the condition under which the raw materials are kept before. If it is in this sense then the materials before molding are kept in a dry state at 31⁰C. The Ridsdale-Dietert A.F.S standard rammer manufactured by RIDSDALE & CO Ltd Serial no 713 is used to prepare the standard A.F.S test samples. an electronic digital stainless hardened veneer caliper model no G04086472 made by HUAWEL. The Figures in present form are very clear and does not need any further adjustment; maybe you need to upgrade your system. The equations which we discovered may not be clear in printing have been presented using equation editor. The sample crushing strength is to be evaluated by dividing the maximum compressive load (kN) by cross sectional area of brick (m²). However, this could not be evaluated as the test samples remain stable under test condition of the tester capacity. <i>Cold crushing strength</i> The test brick samples withstood the crushing load without crumbling at 95.6MPa maximum load capacity of the crushing machine. This implies that the magnitude of load or time (or both) set are insufficient to cause failure of bricks. <i>Refractoriness</i> All the brick mixes possess adequate refractoriness as none crumbled below 1005°C on sintering for an hour. <i>Thermal shock resistance</i> Each brick shows no visual macro observable incipient cracks after seven cycles.